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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the present application:

1-49. (Canceled).

50. (Currently Amended) A vision system for a vehicle, comprising:

a vehicle equipped with at least two image capture devices, said ~~at least two~~ image capture devices capturing images external of the vehicle, said ~~at least two~~ image capture devices having overlapping fields of view;

said vehicle equipped with an image processor, wherein outputs of image data captured by said at least two image capture devices are processed by said image processor, said image processor producing a synthesized image from said outputs of image data captured by said at least two image capture devices, and wherein said synthesized image comprises a composite image of said image data captured by said two image capture devices without duplication of image information;

said vehicle equipped with a display screen displaying said synthesized image, said synthesized image displayed as a single image on a single display screen that is viewable by a driver of said vehicle when the driver is normally operating said vehicle, wherein the displayed image displayed on said single display screen includes an image portion from an image captured by each of said at least two image capture devices; and

said image processor processing said outputs of image data by at least one technique chosen from luminant blending, chrominant blending, dynamic range extending, pixel group compensation, anti-blooming, multiple exposure, image morphing compensation and image warping compensation.

51. (Currently Amended) The vision system for a vehicle of claim 50, wherein said at least two image capture devices are positioned on opposite sides of the vehicle, and wherein the

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synthesized image comprises at least two image portions arranged on said screen in the same orientation as respective locations of said at least two image capture devices on the vehicle, and wherein said image portions are reverse row sequenced from images captured by the respective ones of said at least two image capture devices.

52. (Currently Amended) The vision system for a vehicle of claim 50, wherein at least one of (a) said at least two image capture devices have their fields of view in a direction generally rearward with respect to the vehicle, (b) said at least two image capture devices have their fields of view in a direction generally forward with respect to the vehicle, (c) said vision system comprises a night-vision system, (d) said at least two image capture devices have their fields of view generally symmetrical about the longitudinal axis of the vehicle and (e) said at least two image capture devices are positioned on opposite sides of the vehicle.

53-55. (Canceled).

56. (Previously Presented) The vision system for a vehicle of claim 50, wherein said at least two image capture devices comprise multi-pixel imaging arrays, and wherein said multi-pixel imaging arrays comprise CMOS imaging arrays.

57. (Canceled).

58. (Previously Presented) The vision system for a vehicle of claim 50, wherein said display screen comprises one of (a) a flat panel display comprising one of (i) a liquid crystal display, (ii) a plasma display and (iii) a field emission display, and (b) a cathode ray tube.

59-61. (Canceled).

62. (Previously Presented) The vision system for a vehicle of claim 50, wherein said display screen is at least one of (a) positioned within the field of view of the driver without substantially

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obstructing the view through a windshield, (b) mounted to one of a dashboard, a facia, a header and a windshield of the vehicle, (c) mounted at a position conventionally occupied by an interior rearview mirror, (d) a display of one of a projected and a virtual image and (e) a heads-up display.

63-66. (Canceled).

67. (Currently Amended) The vision system for a vehicle of claim 50, wherein ~~at least one of~~ (a) said fields of view of said ~~at least two~~ image capture devices are dynamically adjustable, ~~(b)~~ said fields of view of said ~~at least two~~ image capture devices are dynamically adjustable at least as a function of vehicle speed, and (c) wherein said ~~at least two~~ image capture devices have variable exposure periods.

68-91. (Canceled).

92. (Currently Amended) A vision system for a vehicle, said vision system comprising:
at least three image capture devices mounted to the vehicle and directed rearwardly with respect to the direction of travel of said vehicle;
wherein at least two of said image capture devices being comprise side image capture devices respectively mounted on opposite lateral sides of said vehicle and at least one of said image capture devices being comprises a center image capture device mounted at a center rear portion of the vehicle between said side image capture devices, and wherein said center image capture device has a field of view that overlaps the fields of view of each of said side image capture devices;
a display system which displays a composite image synthesized from outputs of image data captured by said image capture devices without duplication of image information, said display system displaying said composite image on a single display screen of the vehicle that is viewable by a driver of the vehicle when the driver is normally operating the vehicle, the

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displayed image including an image portion from an image captured by each of said side and center image capture devices; and

wherein said at least three side and center image capture devices are aimed along non-parallel axes and wherein said displayed composite image aids a driver when the driver is reversing maneuvering the vehicle.

93. (Previously Presented) The vision system in claim 92, wherein one of said two side image capture devices images a side blind spot on the side of the vehicle to which it is mounted and wherein the other of said two side image capture devices images a side blind spot on the side of the vehicle to which it is mounted, and wherein said center image capture device of said three image capture devices mounted to the vehicle images a rear blind spot at the rear of the vehicle.

94. (Currently Amended) The vision system in claim 92, wherein ~~at least one of (a) duplicate or redundant duplication of objects that are captured in the overlapping fields of view of said side and center image captured devices is not present in said displayed composite image and (b) said center image capture device has a horizontal field of view that is generally symmetrical about the longitudinal axis of the vehicle.~~

95. (Previously Presented) The vision system in claim 92, wherein at least one of (a) said center image capture device has a horizontal field of view that is generally symmetrical about the longitudinal axis of the vehicle and wherein said displayed composite image approximates a view from a single location and (b) said displayed composite image approximates a view from a single location.

96. (Currently Amended) The vision system in claim 92, wherein said displayed composite image provides to the driver a sense of perspective in order to enhance the driver's ability to maneuver the vehicle rearwardly.

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97. (Currently Amended) The vision system in claim 92 including an electronically generated graphic overlay seen superimposed on said displayed composite image in order to enhance the driver's ability to maneuver the vehicle rearwardly that enhances the driver's understanding of what is in the area adjacent the vehicle.

98. (Previously Presented) The vision system in claim 92, wherein each of said three image capture devices comprises a CMOS imaging array.

99. (Currently Amended) A vision system for a vehicle, said vision system comprising:
at least three image capture devices mounted to the vehicle, each of said image capture devices having a respective generally rearward field of view, at least two of said image capture devices being side image capture devices respectively mounted on opposite lateral sides of said vehicle and at least one of said image capture devices being a center image capture device mounted at a rear center portion of the vehicle between said side image capture devices, and wherein said center image capture device has a field of view that overlaps the fields of view of each of said side image capture devices;

a display system which displays a composite image synthesized from outputs of image data captured by said image capture devices without duplication of image information, said display system displaying said composite image on a single display screen of the vehicle that is viewable by a driver of the vehicle when the driver is normally operating the vehicle, the displayed image including an image portion from an image captured by each of said image capture devices;

wherein an electronically generated graphic overlay is provided on said displayed composite image that enhances the driver's understanding of what is in the area adjacent the vehicle and wherein said displayed composite image aids a driver when the driver is reversing maneuvering the vehicle; and

wherein each of said three image capture devices comprises a CMOS imaging array.

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100. (Currently Amended) The vision system in claim 99, wherein one of said two side image capture devices images a side blind spot on the side of the vehicle to which it is mounted and wherein the other of said two side image capture devices images a side blind spot on the side of the vehicle to which it is mounted, and wherein said center image capture device of said three image capture devices mounted to the vehicle images a rear blind spot at the rear of the vehicle and wherein said graphic overlay is enabled when the vehicle's gear actuator is selected to be in reverse gear during a reversing maneuver of the vehicle.

101. (Currently Amended) The vision system in claim-100_99, wherein at least one of (a) said ~~indicia~~ graphic overlay has a form that responds to the rate of turn of the vehicle, (b) said ~~indicia~~ graphic overlay has a form that responds to at least one of the vehicle's steering system, the vehicle's differential system and a compass, (c) the displayed image approximates a rearward-facing view from a single location, (d) said single location is forward of the driver with respect to said direction of travel, (e) the displayed image includes a dead space which would be occupied by said vehicle in said view, (f) the displayed image includes a dead space which would be occupied by said vehicle in said view and wherein said dead space is the size of a footprint of said vehicle in said view, (g) the displayed image includes a dead space which would be occupied by said vehicle in said view and wherein said dead space includes perspective lines which are aligned with said direction of travel, (h)-(c) said at least three image capture devices are at substantially the same height on the vehicle and -(i)-(d) said at least three image capture devices are aimed along non-parallel axes.

102. (Currently Amended) A vision system for a vehicle, said vision system comprising:
at least three image capture devices mounted to the vehicle, each of said image capture devices having a respective generally rearward field of view, ~~at least~~ two of said image capture devices being side image capture devices respectively mounted on opposite lateral sides of said vehicle and at least one of said image capture devices being a center image capture device mounted at a rear center portion of the vehicle between said side image capture devices, and

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wherein said center image capture device has a field of view that overlaps the fields of view of each of said side image capture devices;

a display system which displays a composite image synthesized from outputs of image data captured by said image capture devices without duplication of image information, said display system displaying said composite image on a single display screen of the vehicle that is viewable by a driver of the vehicle when the driver is normally operating the vehicle, the displayed image including an image portion from an image captured by each of said image capture devices; and

wherein at least one of (a) said ~~at least~~ three image capture devices are at substantially the same height on the vehicle and (b) said ~~at least~~ three image capture devices are aimed along non-parallel axes.

103. (Currently Amended) The vision system in claim 102, wherein the image portion from said center image capture device is compressed, and wherein at least one of (a) said image portion from said center image capture device is vertically compressed; (b) values of adjacent pixels are adjusted as a function of pixel values of removed lines and (c) said image portion from said center image capture device has a vertically central portion and vertically upper and lower portions, wherein said upper and lower portions are laterally wider than said central portion.

104. (Previously Presented) The vision system in claim 102, wherein each of said image capture devices comprises a CMOS imaging array.

105. (Currently Amended) A vision system for a vehicle having a gear actuator, said vision system comprising:

at least two image capture devices positioned on the vehicle and directed rearwardly with respect to the direction of travel of said vehicle, and wherein said two image capture devices have overlapping fields of view;

a display system which displays a composite image synthesized from outputs of image data captured by said two image capture devices without duplication of image information, said

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display system displaying said composite image on a single display screen of the vehicle that is viewable by a driver of the vehicle when the driver is normally operating the vehicle, wherein the displayed composite image displayed on said single display screen includes an image portion from an image captured by each of said at least two image capture devices;

wherein an electronically generated graphic overlay, that enhances the driver's understanding of what is in the area adjacent the vehicle, is seen superimposed on said displayed composite image; and

wherein said graphic overlay is enabled when the vehicle's gear actuator is selected to be in reverse gear.

106. (Currently Amended) The vision system in claim 105, wherein at least one of (a) said indicia graphic overlay has a form that responds to the rate of turn of the vehicle, (b) said indicia graphic overlay has a form that responds to at least one of the vehicle's steering system, the vehicle's differential system and a compass and (b) said graphic overlay has a form that is a function of at least one of the direction or travel and speed of the vehicle.

107. (Previously Presented) The vision system in claim 105, wherein said graphic overlay comprises distance indicia indicating distances behind the vehicle of objects juxtaposed within a grid.

108. (Currently Amended) The vision system in claim 107, wherein at least one of (a) said indicia has a form that responds to the rate of turn of the vehicle, and (b) said indicia has a form that responds to at least one of the vehicle's steering system, the vehicle's differential system and a compass, ~~(c) the displayed image approximates a rearward-facing view from a single location, (d) said single location is forward of the driver with respect to said direction of travel, (e) the displayed image includes a dead space which would be occupied by said vehicle in said view, (f) the displayed image includes a dead space which would be occupied by said vehicle in said view and wherein said dead space is the size of a footprint of said vehicle in said view, and (g) the displayed image includes a dead space which would be occupied by said vehicle in said view and~~

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~~wherein said dead space includes perspective lines which are aligned with said direction of travel.~~

109. (Currently Amended) The vision system in claim 105 including an image processor for processing ~~outputs~~ image data of captured by said at least two image capture devices, wherein said image processor processes said ~~outputs of~~ image data captured by said two image capture devices by at least one technique chosen from luminant blending, chrominant blending, dynamic range extending, pixel group compensation, anti-blooming, multiple exposure, image morphing compensation and image warping compensation.

110. (New) The vision system in claim 107, wherein the displayed image approximates a view from a single location.

111. (New) The vision system in claim 107, wherein the displayed image approximates a view from a single location, and wherein said single location is forward of the driver with respect to said direction of travel.

112. (New) The vision system in claim 107, wherein the displayed image approximates a view from a single location, and wherein the displayed image includes a dead space which would be occupied by said vehicle in said view.

113. (New) The vision system in claim 107, wherein the displayed image approximates a view from a single location, and wherein the displayed image includes a dead space which would be occupied by said vehicle in said view and wherein said dead space comprises a footprint of said vehicle in said view.

114. (New) The vision system in claim 107, wherein the displayed image approximates a view from a single location, and wherein the displayed image includes a dead space which would be

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occupied by said vehicle in said view and wherein said displayed image includes perspective lines.

115. (New) The vision system in claim 107, wherein the displayed image includes a dead space which would be occupied by said vehicle in the fields of view of said two image capture devices.

116. (New) The vision system for a vehicle of claim 50, wherein one of said two image capture devices is associated with a driver side exterior mirror of the vehicle and wherein the other of said two image capture devices is associated with a passenger side exterior mirror of the vehicle.

117. (New) The vision system for a vehicle of claim 50, wherein said fields of view of said two image capture devices are dynamically adjustable at least as a function of vehicle speed.

118. (New) The vision system for a vehicle of claim 50, wherein said two image capture devices have variable exposure periods.

119. (New) The vision system in claim 99, wherein the displayed image approximates a view from a single location.

120. (New) The vision system in claim 99, wherein the displayed image approximates a view from a single location, and wherein the displayed image includes a dead space which would be occupied by said vehicle in said view.

121. (New) The vision system in claim 120, wherein said dead space comprises a footprint of said vehicle in said view.

122. (New) The vision system in claim 120, wherein the displayed image includes perspective lines.

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123. (New) The vision system in claim 102, wherein the image portion from said center image capture device is compressed, and wherein values of adjacent pixels are adjusted as a function of pixel values of removed lines.

124. (New) The vision system in claim 102, wherein the image portion from said center image capture device is compressed, and wherein said image portion from said center image capture device has a vertically central portion and vertically upper and lower portions, and wherein said upper and lower portions are laterally wider than said central portion.

125. (New) A vision system for a vehicle, comprising:

a vehicle equipped with at least two image capture devices, said at least two image capture devices capturing images external of the vehicle, said two image capture devices having overlapping fields of view;

said vehicle equipped with an image processor, wherein image data captured by said two image capture devices are processed by said image processor, said image processor producing a synthesized image from said image data captured by said two image capture devices, and wherein said synthesized image comprises a composite image of said image data of said two image capture devices without duplication of image information;

said vehicle equipped with a display screen displaying said synthesized image, said synthesized image displayed as a single image on a single display screen that is viewable by a driver of said vehicle when the driver is normally operating said vehicle, wherein the displayed image displayed on said single display screen includes an image portion from an image captured by each of said two image capture devices; and

said image processor processing said image data by luminant blending.

126. (New) The vision system of claim 125, wherein said image processor processes said image data by chrominant blending.

127. (New): A vision system for a vehicle, said vision system comprising:

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a left side image capture device mounted at a left side of the vehicle and directed generally rearwardly and sidewardly with respect to the direction of travel of the vehicle, wherein said left side image capture device is mounted at or near a left side exterior rearview mirror of the vehicle;

a right side image capture device mounted at a right side of the vehicle and directed generally rearwardly and sidewardly with respect to the direction of travel of the vehicle, wherein said right side image capture device is mounted at or near a right side exterior rearview mirror of the vehicle;

a center image capture device mounted at a center rear portion of the vehicle and directed generally rearwardly with respect to the direction of travel of the vehicle;

wherein said left image capture device and said center image capture device have overlapping fields of view and wherein said right image capture device and said center image capture device have overlapping fields of view;

an image processor, wherein image data captured by said left, right and center image capture devices are processed by said image processor, wherein said image processor processes said image data captured by said left, right and center image capture devices to synthesize a synthesized composite image, and wherein said synthesized image comprises a composite image of said image data captured by said left, right and center image capture devices without duplication of image information;

a display screen displaying said synthesized composite image, wherein said synthesized composite image is displayed as a single image on a single display screen that is viewable by a driver of said vehicle when the driver is normally operating said vehicle;

wherein the displayed image displayed on said single display screen comprises a left image portion derived from at least a portion of an image captured by said left image capture device, a center portion derived from at least a portion of an image captured by said center image capture device, and a right portion derived from at least a portion of an image captured by said right image capture device, and wherein the displayed image approximates a view from a single location; and

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wherein said image processor processes said image data by luminant blending and at least one technique chosen from chrominant blending, dynamic range extending, pixel group compensation, anti-blooming, multiple exposure, image morphing compensation and image warping compensation.

128. (New): A vision system for a vehicle, said vision system comprising:

a left side image capture device mounted at a left side of the vehicle and directed generally rearwardly and sidewardly with respect to the direction of travel of the vehicle, wherein said left side image capture device is mounted at or near a left side exterior rearview mirror of the vehicle;

a right side image capture device mounted at a right side of the vehicle and directed generally rearwardly and sidewardly with respect to the direction of travel of the vehicle, wherein said right side image capture device is mounted at or near a right side exterior rearview mirror of the vehicle;

a center image capture device mounted at a center rear portion of the vehicle and directed generally rearwardly with respect to the direction of travel of the vehicle;

wherein said left image capture device and said center image capture device have overlapping fields of view and wherein said right image capture device and said center image capture device have overlapping fields of view;

an image processor, wherein image data captured by said left, right and center image capture devices are processed by said image processor, wherein said image processor processes said image data captured by said left, right and center image capture devices to synthesize a synthesized composite image, and wherein said synthesized image comprises a composite image of said image data captured by said left, right and center image capture devices without duplication of image information;

a display screen displaying said synthesized composite image, wherein said synthesized composite image is displayed as a single image on a single display screen that is viewable by a driver of said vehicle when the driver is normally operating said vehicle;

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wherein the displayed image displayed on said single display screen comprises a left image portion derived from at least a portion of an image captured by said left image capture device, a center portion derived from at least a portion of an image captured by said center image capture device, and a right portion derived from at least a portion of an image captured by said right image capture device;

wherein the displayed image approximates a view from a single location; and

wherein the displayed image includes a dead space which would be occupied by said vehicle in said view.

129. (New) The vision system in claim 128, wherein said dead space comprises a footprint of said vehicle in said view.

130. (New): A vision system for a vehicle, said vision system comprising:

a left side image capture device mounted at a left side of the vehicle and directed generally rearwardly and sidewardly with respect to the direction of travel of the vehicle, wherein said left side image capture device is mounted at or near a left side exterior rearview mirror of the vehicle;

a right side image capture device mounted at a right side of the vehicle and directed generally rearwardly and sidewardly with respect to the direction of travel of the vehicle, wherein said right side image capture device is mounted at or near a right side exterior rearview mirror of the vehicle;

a center image capture device mounted at a center rear portion of the vehicle and directed generally rearwardly with respect to the direction of travel of the vehicle;

wherein said left image capture device and said center image capture device have overlapping fields of view so that a portion of images captured by said left image capture device and said center image capture device encompass similar regions exterior the vehicle, and wherein said right image capture device and said center image capture device have overlapping fields of view so that a portion of images captured by said right image capture device and said center image capture device encompass similar regions exterior the vehicle;

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an image processor, wherein image data captured by said left, right and center image capture devices are processed by said image processor, wherein said image processor processes said image data captured by said left, right and center image capture devices to synthesize a synthesized composite image, and wherein said synthesized image comprises a composite image of said image data captured by said left, right and center image capture devices without duplication of image information;

a display screen for displaying said synthesized composite image, wherein said synthesized composite image is displayed as a single image on a single display screen that is viewable by a driver of said vehicle when the driver is normally operating said vehicle; and

wherein the displayed image displayed on said single display screen includes an image portion from an image captured by each of said left, right and center image capture devices, and wherein the displayed image approximates a view from a single location.

131. (New): A vision system for a vehicle, said vision system comprising:

a left side image capture device mounted at a left side of the vehicle and directed generally rearwardly and sidewardly with respect to the direction of travel of the vehicle, wherein said left side image capture device is mounted at or near a left side exterior rearview mirror of the vehicle;

a right side image capture device mounted at a right side of the vehicle and directed generally rearwardly and sidewardly with respect to the direction of travel of the vehicle, wherein said right side image capture device is mounted at or near a right side exterior rearview mirror of the vehicle;

a center image capture device mounted at a center rear portion of the vehicle and directed generally rearwardly with respect to the direction of travel of the vehicle;

wherein said left image capture device and said center image capture device have overlapping fields of view so that a portion of images captured by said left image capture device and said center image capture device encompass similar regions exterior the vehicle, and wherein said right image capture device and said center image capture device have overlapping fields of

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view so that a portion of images captured by said right image capture device and said center image capture device encompass similar regions exterior the vehicle;

an image processor, wherein image data captured by said left, right and center image capture devices are processed by said image processor, wherein said image processor processes said image data captured by said left, right and center image capture devices to synthesize a synthesized composite image, and wherein said synthesized image comprises a composite image of said image data captured by said left, right and center image capture devices without duplication of image information;

a display screen for displaying said synthesized composite image, wherein said synthesized composite image is displayed as a single image on a single display screen that is viewable by a driver of said vehicle when the driver is normally operating said vehicle;

wherein the displayed image displayed on said single display screen includes an image portion from an image captured by each of said left, right and center image capture devices; and

wherein said displayed composite image provides to the driver a sense of perspective in order to enhance the driver's ability to maneuver the vehicle.

132. (New) The vision system in claim 131 including an electronically generated graphic overlay seen superimposed on said displayed composite image in order to enhance the driver's ability to maneuver the vehicle rearwardly.

133. (New) The vision system in claim 131, wherein the displayed image on said single display screen approximates a view from a single location.